Application Data Sheet

Application Information

Application number::	09/930,020
Filing Date::	08/14/01
Application Type::	Regular
Subject Matter::	Utility
Suggested classification::	
Suggested Group Art Unit::	
CD-ROM or CD-R??::	
Number of CD disks::	
Number of copies of CDs::	
Sequence Submission::	
Computer Readable Form (CRF)?::	
Number of copies of CRF::	
Title::	Methods of Diagnosis of Colorectal Cancer, Compositions and Methods of Screening for Colorectal Cancer Modulators
Attorney Docket Number::	018501-003100US
Request for Early Publication::	No
Request for Non-Publication::	No
Suggested Drawing Figure::	
Total Drawing Sheets::	0
Small Entity?::	Yes
Latin name::	
Variety denomination name::	
Petition included?::	No
Petition Type::	
Licensed US Govt. Agency::	
Contract or Grant Numbers One::	
Secrecy Order in Parent Appl.::	No

Applicant Information

Applicant Authority Type::	Inventor
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Country of Residence::	US
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State or Province of mailing address::	CA
Country of mailing address::	US
Postal or Zip Code of mailing address::	94131

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City of Mailing Address::	Menlo Park
State or Province of mailing address::	CA
Country of mailing address::	US
Postal or Zip Code of mailing address::	94025

Initial 10/16/01

Applicant Authority Type::   Inventor
Primary Citizenship Country::   US
Status::   Full Capacity
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State or Province of mailing address:: CA
Country of mailing address::   US
Postal or Zip Code of mailing address:: 94062

Correspondence Information

Correspondence Customer Number::   20350

Representative Information

Representative Customer Number::   20350

Domestic Priority Information

Application::	Continuity Type::	Parent Application::	Parent Filing Date::
09/633,733	CIP	Utility	September 15, 2000

Foreign Priority Information

Country::	Application number::	Filing Date::

Assignee Information

Assignee Name::   Eos Biotechnology, Inc.

Street of mailing address::   225A Gateway Boulevard

City of mailing address::   South San Francisco

State or Province of mailing address::   California

Country of mailing address::   USA

Postal or Zip Code of mailing address::   94080

Initial 10/16/01

UNITED STATES PATENT AND TRADEMARK OFFICE
DOCUMENT CLASSIFICATION BARCODE SHEET

Preliminary Amendments

3

Level - 2
Version 1.1
Updated - 8/01/01

COPY OF PAPERS
ORIGINALLY FILED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

GISH *et al.*

Application No.: 09/930,020

Filed: August 14, 2001

For: METHODS OF DIAGNOSIS OF
COLORECTAL CANCER,
COMPOSITIONS AND METHODS OF
SCREENING FOR COLORECTAL
CANCER MODULATORS

Examiner: Not yet assigned

Art Unit: 1642

COMMUNICATION UNDER

37 C.F.R. §§ 1.821-1.825

AND

PRELIMINARY AMENDMENT

Box SEQUENCE
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the request to comply with Requirements for Patent
Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures,
37 C.F.R. §§ 1.821-1.825, that accompanied the Notice to File Missing Parts of
Nonprovisional Application mailed September 13, 2001, Applicants submit herewith the
required paper copy and computer readable copy of the Sequence Listing. Please amend
the specification as follows.

In the Specification:

Please replace paragraph **[45]** beginning at page 13, line 9 with the following:

--**[45]** The extracellular domains of transmembrane proteins are diverse; however, conserved motifs are found repeatedly among various extracellular domains. Conserved structure and/or functions have been ascribed to different extracellular motifs. For example, cytokine receptors are characterized by a cluster of cysteines and a WSXWS (SEQ ID NO:3) (W= tryptophan, S= serine, X=any amino acid) motif. Immunoglobulin-like domains are highly conserved. Mucin-like domains may be involved in cell adhesion and leucine-rich repeats participate in protein-protein interactions.--

Please replace the paragraph (**TABLE 2**) beginning at page 96, line 5 with the following:

--TABLE 2 CBF9 DNA and Protein Sequences

CBF9 DNA sequence (SEQ ID NO:1)

Gene name: ESTs
Unigene number: Hs.157601
Probeset Accession #:   W07459
Nucleic Acid Accession #:   AC005383
Coding Sequence: 328-2751 (underlined sequences correspond to start
                                  and stop codons)

```
1          11         21         31         41         51
|          |          |          |          |          |
GACAGTGTTC GCGGCTGCAC CGCTCGGAGG CTGGGTGACC CGCGTAGAAG TGAAGTACTT    60
TTTTATTTGC AGACCTGGGC CGATGCCGCT TTAAAAAACG CGAGGGGCTC TATGCACCTC   120
CCTGGCGGTA GTTCCTCCGA CCTCAGCCGG GTCGGGTCGT GCCGCCCTCT CCCAGGAGAG   180
ACAAACAGGT GTCCCACGTG GCAGCCGCGC CCCGGGCGCC CCTCCTGTGA TCCCGTAGCG   240
CCCCCTGGCC CGAGCCGCGC CCGGGTCTGT GAGTAGAGCC GCCCGGGCAC CGAGCGCTGG   300
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CACTTTGCCA TCACAGTCTG TGACGGTCTG GACATCAGCC CCGAGAGGGT CAGAGTGGGA   600
GCATTCCAGT TCAGTTCCAC TCCTCATCTG GAATTCCCCT TGGATTCATT TTCAACCCAA   660
CAGGAAGTGA AGGCAAGAAT CAAGAGGATG GTTTTCAAAG GAGGGCGCAC GGAGACGGAA   720
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CAGATCCTCA TCATCGTCAC TGATGGGAAG TCCCAGGGGG ATGTGGCACT GCCATCCAAG   840
CAGCTGAAGG AAAGGGGTGT CACTGTGTTT GCTGTGGGGG TCAGGTTTCC CAGGTGGGAG   900
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GCGGGCACCA CTCTGGACGG CTTCCTGCGG GCCAAAGTCT TCGTGAAGCG GTTTGTGCGG  1440
GCCGTGCTGA GCGAGGACTC TCGGGCCCGA GTGGGTGTGG CCACATACAG CAGGGAGCTG  1500
CTGGTGGCGG TGCCTGTGGG GGAGTACCAG GATGTGCCTG ACCTGGTCTG GAGCCTCGAT  1560
GGCATTCCCT TCCGTGGTGG CCCCACCCTG ACGGGCAGTG CCTTGCGGCA GGCGGCAGAG  1620
CGTGGCTTCG GGAGCGCCAC CAGGACAGGC CAGGACCGGC CACGTAGAGT GGTGGTTTTG  1680
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GAGCTGCTCC TGCTGGGGTGT AGGCAGTGAG GCCGTGCGGG CAGAGCTGGA GGAGATCACA  1800
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AGCTTTGTGA GAAGCTGTGC CCTCCAGTTT GAGGTGAACC CTGACGTGAC ACAGGTCGGC  2040
CTGGTGGTGT ATGGCAGCCA GGTCCAGACT GCCTTCGGGC TGGACACCAA ACCCACCCGG  2100
GCTGCGATGC TGCGGGCCAT TAGCCAGGCC CCCTACCTAG GTGGGGTGGG CTCAGCCGGC  2160
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GGCACTGAAA  TGGTGCCTAC  CTTCTGGAAT  GTCTGTGCCC  CAGGTCCTTA GAATGTCTGC  2760
TTCCCGCCGT  GGCCAGGACC  ACTATTCTCA  CTGAGGGAGG  AGGATGTCCC  AACTGCAGCC  2820
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GCAGCTTTTC  CACTTCCCCA  GAGACATTCT  GGATGCATTT  GCATTGAGTC  TGAAAGGGGG  3180
CTTGAGGGAC  GTTTGTGACT  TCTTGGCGAC  TGCCTTTTGT  GTGTGGAAGA  GACTTGGAAA  3240
GGTCTCAGAC  TGAATGTGAC  CAATTAACCA  GCTTGGTTGA  TGATGGGGGA  GGGGCTGAGT  3300
TGTGCATGGG  CCCAGGTCTG  GAGGGCCACG  TAAAATCGTT  CTGAGTCGTG  AGCAGTGTCC  3360
ACCTTGAAGG  TCTTC
```

CBF9 Protein sequence (SEQ ID NO:2)

Gene name:	ESTs
Unigene number:	Hs.157601

Protein Accession #: none found

Signal sequence:	1-17
Transmembrane domains:	none found
VGW domains:	49-223; 341-518; 529-706
EGF domains:	298-333; 715-748
Cellular Localization:	plasma membrane

```
1          11         21         31         41         51
|          |          |          |          |          |
MPPFLLLEAV CVFLFSRVPP SLPLQEVHVS KETIGKISAA SKMMWCSAAV DIMFLLDGSN  60
SVGKGSFERS KHFAITVCDG LDISPERVRV GAFQFSSTPH LEFPLDSFST QQEVKARIKR  120
MVFKGGRTET ELALKYLLHR GLPGGRNASV PQILIIVTDG KSQGDVALPS KQLKERGVTV  180
FAVGVRFPRW EELHALASEP RGQHVLLAEQ VEDATNGLFS TLSSSAICSS ATPDCRVEAH  240
PCEHRTLEMV REFAGNAPCW RGSRRTLAVL AAHCPFYSWK RVFLTHPATC YRTTCPGPCD  300
SQPCQNGGTC VPEGLDGYQC LCPLAFGGEA NCALKLSLEC RVDLLFLLDS SAGTTLDGFL  360
RAKVFVKRFV RAVLSEDSRA RVGVATYSRE LLVAVPVGEY QDVPDLVWSL DGIPFRGGPT  420
LTGSALRQAA ERGFGSATRT GQDRPRRVVV LLTESHSEDE VAGPARHARA RELLLLGVGS  480
EAVRAELEEI TGSPKHVMVY SDPQDLFNQI PELQGKLCSR QRPGCRTQAL DLVFMLDTSA  540
SVGPENFAQM QSFVRSCALQ FEVNPDVTQV GLVVYGSQVQ TAFGLDTKPT RAAMLRAISQ  600
APYLGGVGSA GTALLHIYDK VMTVQRGARP GVPKAVVVLT GGRGAEDAAV PAQKLRNNGI  660
SVLVVGVGPV LSEGLRRLAG PRDSLIHVAA YADLRYHQDV LIEWLCGEAK QPVNLCKPSP  720
CMNEGSCVLQ NGSYRCKCRD GWEGPHCENR EWSSCSVCVS QGWILETPLR HMAPVQEGSS  780
RTPPSNYREG LGTEMVPTFW NVCAPGP
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```

Please insert the accompanying paper copy of the Sequence Listing, page numbers 1 to 4, at the end of the application.
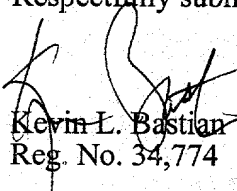

REMARKS

Applicants request entry of this amendment in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment is accompanied by a floppy disk containing the above named sequences, SEQ ID NOS:1-3, in computer readable form, and a paper copy of the sequence information which has been printed from the floppy disk.

The information contained in the computer readable disk was prepared through the use of the software program "PatentIn" and is identical to that of the paper copy. This amendment contains no new matter.

Attached hereto is a marked-up version of the changes made to the Specification and Abstract by the current Amendment. The attached pages are captioned **"VERSION WITH MARKINGS TO SHOW CHANGES MADE."**

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,

Kevin L. Bastian
Reg. No. 34,774

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KLB:dmw

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

Paragraph **[45]** beginning at line 23 of page 6 has been amended as follows:

[45]   The extracellular domains of transmembrane proteins are diverse; however, conserved motifs are found repeatedly among various extracellular domains. Conserved structure and/or functions have been ascribed to different extracellular motifs. For example, cytokine receptors are characterized by a cluster of cysteines and a WSXWS (SEQ ID NO:3) (W= tryptophan, S= serine, X=any amino acid) motif. Immunoglobulin-like domains are highly conserved. Mucin-like domains may be involved in cell adhesion and leucine-rich repeats participate in protein-protein interactions.

Paragraph (**TABLE 2**) beginning at line 5 of page 96 has been amended as follows:

TABLE 2 CBF9 DNA and Protein Sequences

<u>CBF9 DNA sequence</u> (SEQ ID NO:1)

Gene name: ESTs
Unigene number: Hs.157601
Probeset Accession #:   W07459
Nucleic Acid Accession #:   AC005383
Coding Sequence: 328-2751 (underlined sequences correspond to start
and stop codons)

```
1          11         21         31         41         51
|          |          |          |          |          |
GACAGTGTTC GCGGCTGCAC CGCTCGGAGG CTGGGTGACC CGCGTAGAAG TGAAGTACTT   60
TTTTATTTGC AGACCTGGGC CGATGCCGCT TTAAAAAACG CGAGGGGCTC TATGCACCTC  120
CCTGGCGGTA GTTCCTCCGA CCTCAGCCGG GTCGGGTCGT GCCGCCCTCT CCCAGGAGAG  180
ACAAACAGGT GTCCCACGTG GCAGCCGCGC CCCGGGCGCC CCTCCTGTGA TCCCGTAGCG  240
CCCCCTGGCC CGAGCCGCGC CCGGGTCTGT GAGTAGAGCC GCCCGGGCAC CGAGCGCTGG  300
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CACTTTGCCA TCACAGTCTG TGACGGTCTG GACATCAGCC CCGAGAGGGT CAGAGTGGGA  600
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CAGATCCTCA TCATCGTCAC TGATGGGAAG TCCCAGGGGG ATGTGGCACT GCCATCCAAG  840
CAGCTGAAGG AAAGGGGTGT CACTGTGTTT GCTGTGGGGG TCAGGTTTCC CAGGTGGGAG  900
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GAGTTCGCTG GCAATGCCCC ATGCTGGAGA GGATCGCGGC GGACCCTTGC GGTGCTGGCT 1140
GCACACTGTC CCTTCTACAG CTGGAAGAGA GTGTTCCTAA CCCACCCTGC CACCTGCTAC 1200
AGGACCACCT GCCCAGGCCC CTGTGACTCG CAGCCCTGCC AGAATGGAGG CACATGTGTT 1260
CCAGAAGGAC TGGACGGCTA CCAGTGCCTC TGCCCGCTGG CCTTTGGAGG GGAGGCTAAC 1320
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GCGGGCACCA CTCTGGACGG CTTCCTGCGG GCCAAAGTCT TCGTGAAGCG GTTTGTGCGG 1440
GCCGTGCTGA GCGAGGACTC TCGGGCCCGA GTGGGTGTGG CCACATACAG CAGGGAGCTG 1500
CTGGTGGCGG TGCCTGTGGG GGAGTACCAG GATGTGCCTG ACCTGGTCTG GAGCCTCGAT 1560
GGCATTCCCT TCCGTGGTGG CCCCACCCTG ACGGGCAGTG CCTTGCGGCA GGCGGCAGAG 1620
CGTGGCTTCG GGAGCGCCAC CAGGACAGGC CAGGACCGGC CACGTAGAGT GGTGGTTTTG 1680
CTCACTGAGT CACACTCCGA GGATGAGGTT GCGGGCCCAG CGCGTCACGC AAGGGCGCGA 1740
GAGCTGCTCC TGCTGGGTGT AGGCAGTGAG GCCGTGCGGG CAGAGCTGGA GGAGATCACA 1800
GGCAGCCCAA AGCATGTGAT GGTCTACTCG GATCCTCAGG ATCTGTTCAA CCAAATCCCT 1860
GAGCTGCAGG GGAAGCTGTG CAGCCGGCAG CGGCCAGGGT GCCGGACACA AGCCCTGGAC 1920
CTCGTCTTCA TGTTGGACAC CTCTGCCTCA GTAGGGCCCG AGAATTTTGC TCAGATGCAG 1980
AGCTTTGTGA GAAGCTGTGC CCTCCAGTTT GAGGTGAACC CTGACGTGAC ACAGGTCGGC 2040
CTGGTGGTGT ATGGCAGCCA GGTGCAGACT GCCTTCGGGC TGGACACCAA ACCCACCGGG 2100
GCTGCGATGC TGCGGGCCAT TAGCCAGGCC CCCTACCTAG GTGGGGTGGG CTCAGCCGGC 2160
ACCGCCCTGC TGCACATCTA TGACAAAGTG ATGACCGTCC AGAGGGGTGC CCGGCCTGGT 2220
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GTCCCCAAAG CTGTGGTGGT GCTCACAGGC GGGAGAGGCG CAGAGGATGC AGCCGTTCCT  2280
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AGTGAGGGTC TGCGGAGGCT TGCAGGTCCC CGGGATTCCC TGATCCACGT GGCAGCTTAC  2400
GCCGACCTGC GGTACCACCA GGACGTGCTC ATTGAGTGGC TGTGTGGAGA AGCCAAGCAG  2460
CCAGTCAACC TCTGCAAACC CAGCCCGTGC ATGAATGAGG GCAGCTGCGT CCTGCAGAAT  2520
GGGAGCTACC GCTGCAAGTG TCGGGATGGC TGGGAGGGCC CCCACTGCGA GAACCGTGAG  2580
TGGAGCTCTT GCTCTGTATG TGTGAGCCAG GGATGGATTC TTGAGACGCC CCTGAGGCAC  2640
ATGGCTCCCG TGCAGGAGGG CAGCAGCCGT ACCCCTCCCA GCAACTACAG AGAAGGCCTG  2700
GGCACTGAAA TGGTGCCTAC CTTCTGGAAT GTCTGTGCCC CAGGTCCTTA GAATGTCTGC  2760
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ATGCTGCTTA GAGACAAGAA AGCAGCTGAT GTCACCCACA AACGATGTTG TTGAAAAGTT  2880
TTGATGTGTA AGTAAATACC CACTTTCTGT ACCTGCTGTG CCTTGTTGAG GCTATGTCAT  2940
CTGCCACCTT TCCCTTGAGG ATAAACAAGG GGTCCTGAAG ACTTAAATTT AGCGGCCTGA  3000
CGTTCCTTTG CACACAATCA ATGCTCGCCA GAATGTTGTT GACACAGTAA TGCCCAGCAG  3060
AGGCCTTTAC TAGAGCATCC TTTGGACGGC GAAGGCCACG GCCTTTCAAG ATGGAAAGCA  3120
GCAGCTTTTC CACTTCCCCA GAGACATTCT GGATGCATTT GCATTGAGTC TGAAAGGGGG  3180
CTTGAGGGAC GTTTGTGACT TCTTGGCGAC TGCCTTTTGT GTGTGGAAGA GACTTGGAAA  3240
GGTCTCAGAC TGAATGTGAC CAATTAACCA GCTTGGTTGA TGATGGGGGA GGGGCTGAGT  3300
TGTGCATGGG CCCAGGTCTG GAGGGCCACG TAAAATCGTT CTGAGTCGTG AGCAGTGTCC  3360
ACCTTGAAGG TCTTC
```

CBF9 Protein sequence (SEQ ID NO:2)

Gene name: ESTs
Unigene number: Hs.157601

Protein Accession #: none found

Signal sequence: 1-17
Transmembrane domains: none found
VGW domains: 49-223; 341-518; 529-706
EGF domains: 298-333; 715-748
Cellular Localization: plasma membrane

```
1          11         21         31         41         51
|          |          |          |          |          |
MPPFLLLEAV CVFLFSRVPP SLPLQEVHVS KETIGKISAA SKMMWCSAAV DIMFLLDGSN   60
SVGKGSFERS KHFAITVCDG LDISPERVRV GAFQFSSTPH LEFPLDSFST QQEVKARIKR  120
MVFKGGRTET ELALKYLLHR GLPGGRNASV PQILIIVTDG KSQGDVALPS KQLKERGVTV  180
FAVGVRFPRW EELHALASEP RGQHVLLAEQ VEDATNGLFS TLSSSAICSS ATPDCRVEAH  240
PCEHRTLEMV REFAGNAPCW RGSRRTLAVL AAHCPFYSWK RVFLTHPATC YRTTCPGPCD  300
SQPCQNGGTC VPEGLDGYQC LCPLAFGGEA NCALKLSLEC RVDLLFLLDS SAGTTLDGFL  360
RAKVFVKRFV RAVLSEDSRA RVGVATYSRE LLVAVPVGEY QDVPDLVWSL DGIPFRGGPT  420
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CMNEGSCVLQ NGSYRCKCRD GWEGPHCENR EWSSCSVCVS QGWILETPLR HMAPVQEGSS  780
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